

Title (en)  
Variable geometry fuel injector

Title (de)  
Kraftstoff-Einspritzdüse mit verstellbarer Geometrie

Title (fr)  
Injecteur de carburant à géométrie variable

Publication  
**EP 0735318 B1 20001115 (EN)**

Application  
**EP 96301783 A 19960315**

Priority  
GB 9506116 A 19950325

Abstract (en)  
[origin: EP0735318A2] A combustion chamber head assembly consists of an annular, domed combustor head (20) separated on its downstream side from the combustion region (26) by an annular bulkhead (22). A number of fuel injector means (10) are spaced apart around the head assembly and extend through to supply fuel-air mixture to the combustor region (26) through apertures (30) in the bulkhead (22). Fuel is supplied by a nozzle (10) at the upstream end of a mixing region (68). Air is admitted to this region(68) through a variable geometry airflow arrangement comprising several airflow passage (66,74) disposed concentrically around the nozzle (10), the passages may include swirl vanes (44,46). A portion (88) of the wall (84) surrounding the mixing region(68) is axially translatable to close-off one of the air inlet passages (74) and direct air from the mixing region (68) into the cavity (24) enclosed by the combustor head (20) and bulkhead (22) from where it escapes into the combustion region(26) through air-only apertures (32,34) in the bulkhead wall. <IMAGE>

IPC 1-7  
**F23C 7/00**; **F23R 3/26**

IPC 8 full level  
**F23C 7/00** (2006.01); **F23R 3/26** (2006.01)

CPC (source: EP US)  
**F23C 7/008** (2013.01 - EP US); **F23R 3/26** (2013.01 - EP US)

Cited by  
EP1375891A1; JP4785932B2; DE10233161A1; DE10233161B4; FR3011317A1; CN105593602A; RU2660729C2; US10180256B2; US8128398B2; WO2015049446A1; WO2007060216A1; JP2009517621A

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